

***REMARKS***

In the foregoing amendments, claims 1 and 13 are amended, merely to clarify that the channel parameters are associated with “a channel” on one of the nodes. Claims 1-20 remain pending in the present application.

**Indication of Allowable Subject Matter**

Applicants wish to express their appreciation to the Examiner for the indication of allowable subject matter in which claims 4, 9, 12, 17, and 20 would be allowable if re-written in independent form to include the subject matter of independent claims 1 and 13. However, Applicants choose not to amend the claims as suggested by the Examiner at this time because it is believed, as discussed below, that the pending claims are allowable in their present form.

**Response to 35 U.S.C. §103 Rejection**

Claims 1, 2, 7, and 13 stand rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Chappell* (U.S. Patent No. 6,425,132). Claim 3 stands rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Chappell* (U.S. Patent No. 6,425,132) in view of *Schwartz* (U.S. Patent No. 5,883,882). Claims 5, 6, 14, and 15 stand rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Chappell* (U.S. Patent No. 6,425,132) in view of *Hsu et al.* (U.S. Patent No. 6,483,814). Claims 8, 10, 11, 16, 18, and 19 stand rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Chappell* (U.S. Patent No. 6,425,132) in view of *Chen et al.* (U.S. Patent No. 6,032,019) and *Hsu et al.* (U.S. Patent No. 6,483,814).

Applicants respectfully traverse these rejections because the cited references, taken alone or in combination, do not teach or suggest all of the claimed elements of independent claims 1 and 13. Furthermore, the cited references do not provide any suggestion or motivation to modify *Chappell* or combine reference teachings as alleged in the Office Action.

In order to make a proper *prima facie* case of obviousness, three basic criteria must be met, as set forth in MPEP 706.02(j). First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the

prior art references, when combined, must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on Applicant's disclosure.

Each of independent claims 1 and 13 includes "*a number of group level test result components*," "*a number of node level test result components*," and "*a number of channel level test result components*" generated on a display device. The group level test result components include "*a number of group parameters associated with the at least one group*." The node level test result components include "*a number of node parameters associated with one of the nodes*." The channel level test result components include "*a number of channel parameters associated with a channel on one of the nodes*."

The Office Action alleges that *Chappell*'s "channel plan meets the limitations of channel level test results that include a number of channel parameters." Applicants respectfully disagree. It should be noted that *Chappell*'s channel plan actually includes a bandwidth setting, a start frequency, a point number, a frequency increment, a unique node number, and a reverse telemetry frequency. These settings define how the ingress modem 60 obtains measurements and are not related to channel level test result components as claimed. *Chappell* uses the settings for establishing how measurements of the nodes are made, but fails to teach or suggest that the settings are used for measurements on the "channel level." In fact, *Chappell* appears to be silent as to "*channel level test result components*." For a proper rejection of a claim under 35 U.S.C. §103 as being obvious based upon a single reference, the reference must disclose, teach, or suggest, either implicitly or explicitly, all elements/features/steps of the claim at issue. *See, e.g., In Re Dow Chemical*, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988), and *In re Keller*, 208 U.S.P.Q.2d 871, 881 (C.C.P.A. 1981).

*Chappell* seems to make measurements on the node level only, failing to provide any teaching or suggestion to measure on the channel or group levels. As pointed out in the Office Action, the Examiner recognizes that *Chappell* does not disclose performing spectral analysis on a group of nodes. The Office Action alleges however that it would have been obvious to a person of ordinary skill in the art "to select the composite signal for spectral analysis in addition to selecting individual

nodes" and that one of ordinary skill in the art "would have been motivated to do this to receive [an] indication of the average performance of the group of nodes in a specified area." Applicants respectfully disagree with this allegation for at least the following reasons.

First, although *Chappell* uses a composite signal, which is a combination of the signals from the nodes 32<sub>1</sub> to 32<sub>N</sub>, *Chappell* fails to teach or suggest that "group level test result components" are derived from this composite signal and generated on a display device. In fact, *Chappell* does not perform spectral analysis on this composite signal or on any signal at the group level. Instead, *Chappell*'s composite signal is actually used for transmitting a "node identifier" to the ingress modem 60. In response to the node identifier, the ingress modem 60 prompts the test point switch 64 via the node selection switch 65 to couple the signal from the respective identified node to the ingress modem 60. The ingress modem 60 then performs spectral analysis upon the received upstream signal from the identified node only. See *Chappell*, col. 6, lines 1-15. *Chappell* does not disclose spectral analysis on a group of nodes, and therefore fails to provide "group level test result components" for generation on the display device as claimed.

Furthermore, *Chappell* does not suggest selecting the composite signal for spectral analysis as is alleged in the Office Action. Such a modification is also not taught or suggested anywhere in the prior art. In fact, the Office Action appears to use impermissible hindsight, relying on Applicant's own disclosure, to fill in the gap where the prior art is lacking.

For at least these reasons, it is believed that the independent claims 1 and 13 are allowable over *Chappell*. Furthermore, Applicants assert that the remaining references fail to overcome the deficiencies of *Chappell*. Specifically, the remaining references do not teach or suggest generating "group level," "node level," and "channel level" test result components on a display device, wherein the test result components include a number of "group parameters," "node parameters," and "channel parameters." These other references, like *Chappell*, appear to measure and display signals at one level only. Therefore, even when combined, the references do not meet all of the features of independent claims 1 and 13.

Even assuming, for the sake of argument, that the references were to include all of the claimed elements, the references would still fail to meet the criteria set forth

in 35 U.S.C. §103 because there is no teaching in the prior art as to how the references could be combined. "The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). "There must be some reason, suggestion, or motivation found in the prior art whereby a person of ordinary skill in the field of the invention would make the combination." *In re Oetiker*, 977 F.2d 1443, 1447, 24 USPQ 2d 1443 (Fed. Cir. 1992).

Dependent claims 2, 3, 5-8, 10, 11, 14-16, 18, and 19 are believed to be allowable for at least the reason that these claims depend from allowable independent claims 1 and 13. *In re Fine, supra*.

Prior Art Made of Record

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

***CONCLUSION***

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all rejections have been traversed and that pending claims 1-20 are in condition for allowance. Favorable reconsideration and allowance of the present application and claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned agent at (770) 933-9500.

Respectfully submitted,

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